

EXPLANATORY NOTES ON REMBRANDT'S PRINT TECHNIQUE

The history of Engraving and Etching

As early as the 15th century, goldsmiths and engravers of weapons were the ones who possessed the expertise required for engraving. A first attempt at making an impression from an engraved metal would certainly have been done during this period. Even before 1450, engravings appear to have become independent artistic expressions. These products were mainly of German or Flemish origin.

At the end of the 15th century, it was Albrecht Dürer (1471-1528) who perfected the technique and enhanced the artistic value of engraving.

During the 16th century, the Italian Marcantonio Raimondi, and the Dutchman Lucas van Leyden followed him closely. Parallel to the graphic works of art, a flourishing trade developed in the form of printed 'playing cards'. Without a doubt, Lucas van Leyden (1494-1533) can be seen as the most important Dutch engraver, and his oeuvre of some 170 engravings has been of great influence on the development of Dutch printing.

In the middle of the 16th century, the focal point of all printing activities was still Antwerp. Plantijn played an important role in the book printing production, and Hieronymus Cock published large amounts of prints in his store. The Fall of Antwerp in 1585 stimulated the cultural development in the northern Provinces.

By the end of the 16th century, etching gained a place equal to engraving. Genres, and new trends such as realism, were stimulated through graphic techniques.

An important phenomenon was the difference between free etchers and the reproductive engravers. Painters discovered the etching technique as a means of free expression. This introduced the notion of 'painter-etcher'. The engraving was being relegated to the position of an excellent book illustration technique.

As the Northern Provinces liberated themselves from Spanish domination, a feeling of solidarity grew and the population enjoyed their newly gained independence. Their belief and strong willpower to make this independence last sent strong impulses to the economy and cultural life. The artistic beliefs connected to the decennia long European Mannerism was ready for renewal. There was an interest in daily life and reality in general. This, in turn, initiated a tendency towards realism. The sobriety proclaimed by the Protestant Church exerted additional influences on this development. Distribution made prints an excellent medium to propagate new ideologies and ideas.

Another important influence in Dutch art proved to be the German artist Adam Elsheimer (1578-1610), applying a renewed perspective in which the vanishing point was kept within the overall image. In addition, he made use of an exaggerated contrast between light and dark: the so-called "claire-obscur". He directly influenced the young Rembrandt.

The enormous graphic output of the 17th century can be divided into the following specialisations: landscapes, marines, portraiture, genre scenes, animal life, biblical subjects, italianates, and history.

Furthermore, the Bible has always played an important role in the lives of most artists. Rembrandt especially became an extraordinary exponent of impressive biblical prints. One of his popular Bible stories is the history of Tobit.

The origins of handmade Paper

Originally, a sheet of paper is a tissue of vegetable fibres, an Oriental invention that started in China in approximately 100 AD. They pounded and crushed stems of plants and leaves until they were left with a pasty substance of loose fibre. This so-called pulp, mixed with water, was evenly spread out over a mat and dried.

The Chinese tried to keep the papermaking process secret but it spread to Korea, which was then part of China and actively trading with Japan.

Between the 8th and the 11th centuries, the Persians and the Turks carried this process of papermaking from the Far to the Middle East. In Europe, the first traces can be found among the Moors in Spain in the 12th century, and at much the same time in southern Italy. France, southern Germany and Switzerland also had well-developed paper industries by the late 14th century. In England, white paper was first made in 1495, but on a large scale not until the 18th century.

The first paper mill in the southern Netherlands was established in Hoey as early as 1405. The northern Dutch Provinces only followed in 1586, with paper mills in Dordrecht and Alkmaar. Especially in the Netherlands during the 17th century, the use of paper increased enormously. Our own small production could not meet the demand, and much paper was imported from other European countries. On some occasions, those foreign mills were funded with Dutch money. A striking example is the popular watermark 'Weapon of Amsterdam', which nonetheless was printed in the production of French paper. It was not until the 18th century that the production of Dutch paper could meet the demand in Holland, and was even exported.

Most of the early Dutch paper mills - windmills - were located in the Zaanstreek, an area closely situated to the north of Amsterdam. Clean water and clean air was indispensable for clear fine paper.

Until 1800, European paper was made entirely of rags and hemp pulped in water by simple water-driven machinery. The demand for 'quality' rags grew to the point of scarcity. And by means of export bans for the rag trade, the authorities tried to support the national paper industry. Generally, rags were stripped of buttons, hooks, etcetera, and preferably needed to be white or of a light undyed colour. Subsequently, these rags were being pulverized in a specially constructed machine, called the '*hollander*'. Next, the crushed paper paste (pulp) was kept in barrels. Good quality drawing and etching paper was made in the traditional way by dipping a close-meshed wire mould into the pulp, and giving it a peculiar shake to consolidate the sheet.

The producer would often include his own watermark in the paper. He designed a crest made up of his monogram and a special emblem, and attached this to the meshed copper wire mould. Against the light, we are able to see the structure of the wiring of the mould and the thinner paper layer with the crest incorporated in it. For the most part, watermarks in handmade and old paper have been catalogued. Dating the paper of prints is highly important to determine whether the actual impression was made during the artist's lifetime.

To take the wet paper off the mould was an art in itself. The water would be lightly squeezed out, and the mould tipped over onto a sheet of felt. Then, the paper would be covered with another sheet of felt, and such a pile could grow to over a hundred sheets. The entire pile was called the 'post' and was sandwiched between two thick planks. After pressing out more water, the sheets were carefully taken off the felt, and piece by piece they were dried in a special drying-barn. The sheets were then pulled through a bucket with glue (gum) to close the small pores of

paper. This method would improve its writability. Hot pressing, or the cheaper process of calendering between cylinders, was done to harden the sheets and smoothen their surfaces.

Finally, the handmade sheets of paper were cut to specific sizes and left the mill tied together in reams of 480 sheets at a time, ready for distribution to printers and publishers.

Less expensive etching and writing paper, and some book papers, were made of a mixture of cotton, hemp, esparto, and wood, with a good deal of china clay added to make them smooth and opaque.

Oriental papers, made of bamboo, rice straw and mulberry bark, would be imported for the artist's specific uses. Very thin sheets of Japanese mulberry paper are hand-glazed by rubbing them with stones. Engravers and etchers prefer these qualities for their proofs. Rembrandt, too, experimented with these different types of paper. He also used tinted - oatmeal - Japanese and Chinese paper, as well as vellum.

Papermaking machines, invented in France shortly before 1700, produced paper in rolls, but it was mainly sold cut to size.

Quality

In order to judge the quality of prints, it will be necessary to set some guidelines. For instance, what makes a fine Rembrandt print? Some collectors with small budgets would actually accept a printed impression from 1906, as long as it originated from the original plate. This would still make the impression a real Rembrandt.

If, however, the original plate has been reworked over the centuries, a good impression is much harder to achieve. It might show a heavier printed image, but the plate itself may have lost some of its original Rembrandt 'touch', although later impressions printed from the Basan album and after are still from the original plates. It is clear, though, that they can hardly compare to the beautiful early impressions from Rembrandt himself.

Especially in earlier impressions, the use of 'burr' is plainly visible. The freshly carved burin or drypoint grooves, where minute residues of copper stand up to either side of the drawn lines, cause burr. The ink on the plate will show these residues when the image is transferred onto paper. The more impressions are made and printing pressure of the plate continues, the flatter these upstanding residues will become, and the burr will soon disappear.

Several different states can be printed from an etching, because the artist or the printer wanted to make certain adjustments. This could vary from shaving off the sharp edges of the plate to getting rid of irregularities on the plate surface; to finishing off empty spaces like the sky in a landscape; or the addition of the artist's signature and, at a later stage, the *invenit – fecit - excudit*. If that same plate is handed down through time, deepening the grooves of the lines with a burin can make improvements of the quality.

Every collector will have to draw his own 'borderline of acceptance'. The various states of a period etching, printed on period paper under the supervision of the artist himself, are perfectly acceptable and legitimate. After the artist's death, however, we use the term 'late impression', and we should be more alert, because the print deteriorates from general 'wear and tear'. Paper and their watermarks help determine the right period.

Margins

The term 'margin' is used for the strips of paper sticking out over the plate edges. The presence of a visible paper margin secures the completeness of that print. Even a small margin is adequate proof. Especially in the 17th century, margins were cut to the plate edges to include these prints into larger albums.

Late Impressions

The later impressions have less value than the period prints from Rembrandt's time. It is important to know that after using the original plate, the artist or his publisher would scratch a large X in the surface of the subject matter to make the plate unusable. Only sporadically was the plate re-used for another image. To date, some eighty original Rembrandt plates have survived. Late in the 18th century, printing studios like Basan in Paris have reworked these plates. This diminished some of the originality of Rembrandt's own work. An extravagant example is the famous 'Hundred Guilder print'. In the early 1770's, the English Captain Baillie printed a few impressions, and decided soon after to rework the plate in order to achieve darker impressions. As a result, the image became somewhat inert and the head of Christ changed into a 19th century romanticist image. Baillie then cut the plate into five pieces, and made impressions of each of these smaller plates. In any case, the beautiful and complete impressions belong to the edition from approx. 1680, in fact, after Rembrandt's death. The watermark on the paper of this edition is a French Lilly in a large coat-of-arms.

Copies

During the course of the 17th century, printers and publishers applied for patents from the authorities. Such a patent could be granted for as long as 15 years. In this way, the trade in copies could be partly curbed.

Collector stamps and markings

These are markings put on the back/verso or even the front/recto of prints. They could be stamps, handwritten monograms, signatures, or other notes. The collector markings and notes tell us much about the provenance and the quality of prints.

Since 1921, many of these markings have been catalogued by the avid collector Frits Lugt in his "Les Marques de Collections", two volumes of which were published in 1956.

Classification

In 1967, the art historian G.W.Nowell-Usticke did an extensive study into the origins, the different states, and, most of all, the quality of Rembrandt's graphic oeuvre.

He has attempted to estimate the degree of rarity of Rembrandt's graphic oeuvre out of an estimated total of over 300 individual etchings, and printed during the 17th century only:

0	= unobtainable	(30 prints)
RRRR	= greatest rarity	(40 prints)
RRR	= extremely rare	
RR	= very rare / scarce	(50 prints)
R	= rare / very uncommon	(50 prints)
C1	= uncommon	(50 prints)
C2	= commonest	(50 prints)

Of his own accord, Usticke rejected circa 60 prints as not being by Rembrandt.

There is no certainty about the total number of impressions made of Rembrandt's prints. However, several experts have tried to make educated guesses about this popular question. In general, there may be an average of between 3 and 100 seventeenth century impressions of Usticke's 'R' classification (rarity); and between 100 and 300

seventeenth century impressions of his 'C' classification. We should of course be aware that these estimates concern all of the various states of each print. Of the early states, the number printed is relatively low. And not every print was published in the same volume.

Today, some of Nowell-Usticke C-classifications should be upgraded to R-classifications.

Restoration

Often a print has to be restored, preferably with a certified paper restorer. If the print has surface dirt, it can be easily cleaned using several specialised washing procedures. Small tears can be filled with paper; thin spots and margins can be strengthened. In some cases, it may be necessary to strengthen the complete back of the print with a thin layer of 'papier maché'. If a restoration is professionally and carefully executed and the damage remains 'within reason', such a procedure is perfectly acceptable.

Some criteria to watch for

First and foremost ... are you excited about the print?

If so, then you may wish to ask yourself the following:

Is it an authentic print, and not a copy or reproduction?

Is it printed on period paper from the artist's time?

What is the printed quality? If it requires 'burr' can you see enough of it?

Is there any damage, restoration, or cut within the plate mark?

In what state is the impression?

Is the price reasonable in comparison with similar prints?

*"The more knowledge one possesses,
the more leniently one may judge"*

*"Beauty is in the eye of the beholder, which means
it exists in the consciousness of those who see it."*